

AGENDA ITEM #2-G
June 30, 2009

Action

MEMORANDUM

June 26, 2009

TO: County Council 

FROM: Minna K. Davidson, Legislative Analyst

SUBJECT: **Action** – Executive Regulation 29-08AM, *Fire Safety Code – Fire Department Apparatus Access and Water Supply*

PS and T&E Committees' Joint Recommendation

The Public Safety and Transportation, Infrastructure, Energy, and Environment Committees jointly reviewed Regulation 29-08 on January 29, March 4 and 26, and requested certain amendments. The Committees recommended approval as amended (5-0).

The Executive amended the regulation as the Committees requested, and re-issued it as Executive Regulation 29-08AM to indicate that it was amended after transmittal to the Council. The amended regulation is attached on © 2-10. An approval resolution is on © 1.

Background

The proposed regulation was developed in coordination with the update of the Road Code. As this regulation refers specifically to fire and rescue requirements and there were additional issues to be worked out relating to fire department access, it was issued separately from the Road Code regulations. This regulation would establish public and private roadway and water supply requirements that ensure efficient and timely delivery of emergency assistance and fire suppression services in urban, suburban, and rural settings. It would adopt into the Montgomery County Fire Safety Code the current National Fire Protection Association (NFPA) standards for fire protection in planned building groups, and water supplies for suburban and rural firefighting.

In particular, Regulation 29-08 would permit the use of performance-based design, consistent with the most recent update of the Fire Safety Code regulations which the Council approved in October 2006. This would provide the development community the latitude to find the most cost-effective means of achieving adequate fire department access while enabling the fire service to respond expeditiously to emergency calls. In addition, the regulation would establish requirements for easements for water cisterns in non-hydranted residential subdivisions. (In the future, MCFRS intends to request a CIP project to install underground water cisterns on selected easements.)

The regulation would apply to all new community and commercial development or redevelopment, road reconstruction, and any changes to existing fire department access.

Notice of the proposed regulation and a public hearing announcement were published in the Montgomery County Register on September 1, 2008. The public hearing was held on October 3, 2008 (no speakers). The proposed regulation was reviewed by the Road Code Stakeholders Work Group, and MCFRS received comments from representatives of the Departments of Transportation and Permitting services, and the Montgomery County Planning Board. (Only the Planning Board submitted written comments which are attached on © 38-39.) The comments and MCFRS' responses are summarized in the Executive's original transmittal on © 40-41.

According to the Fiscal Impact Statement (© 42-43), there will be no fiscal impact on County Government or the private sector because new developments and roadway reconstruction are currently reviewed for adequate fire department apparatus access, and resources are already in place for those reviews. If anything, the proposed regulation may have a positive effect on new development because performance-based design may allow for narrower streets.

Committee Review

During their review, the Committees received a briefing on the regulation from MCFRS staff, and discussed the implications of the proposed road width and turning radius requirements, the use of performance based design, and the requirements for easements for underground water cisterns. The Committees and Council staff requested that Executive and Planning Board staff respond to several questions about the regulation, and the written responses are attached on © 22-37.

The Committees were concerned that the regulation as proposed did not clearly indicate whether performance-based design or the prescriptive road widths in the regulation would take precedence, or which standards would apply if the requirements in the regulation differ from the requirements in the Road Code. They were also concerned that regulation did not clearly state that it applies to new development. Regarding the water supply requirements, the Committees felt that there was not enough information about when easements would be required, how long they could be held, or how they would be recorded in land records.

The Committees requested that MCFRS staff draft certain amendments to the proposed regulation. MCFRS staff worked with Planning Board and Council staff to prepare the requested amendments, and they were included in a staff draft which the Committee reviewed on March 26. The Committees recommended approval of the regulation with the amendments in the staff draft and a few additional amendments that were distributed by Council staff at the meeting (© 25). The specific amendments in the staff draft are listed in the attached excerpt from the March 26 Committee packet memo (© 22-23).

Key changes in the amended regulation include:

For the road portion, the amended regulation states that performance-based design is the preferred application in all cases, requires that MCFRS develop a performance-based design manual, and states that the performance-based design manual must be used to resolve any conflicts with Chapter 49 and can be used to resolve conflicts between NFPA 1 and NFPA 1141 or 1142.

For the water supply portion, the amended regulation states that an easement: may be located outside the boundaries of a subdivision or at another accessible location; lasts for 10 years; and, if a water cistern is not installed, may be renewed for one additional ten-year term or released at the end of the first 10 years. The amended regulation also adds requirements to record in the land records any new, renewal, or release of an easement.

This packet contains:

circle #

Approval resolution	1
Amended regulation, clean version	2
Amended regulation, bracketed and underlined version	11
CE transmittal, amended regulation	20
Excerpt, 3/26/09 packet memo	22
Additional amendments distributed on 3/26/09	25
Responses to questions for 3/4/09 worksession	26
Responses to questions for 1/29/09 worksession	34
Planning Board comments in response to the Register advertisement	38
CE transmittal, original regulation	40
Fiscal Impact Statement	42

Resolution No.: _____
Introduced: _____
Adopted: _____

COUNTY COUNCIL
FOR MONTGOMERY COUNTY, MARYLAND

By: County Council

Subject: Approval of Executive Regulation 29-08AM, Fire Safety Code – Fire Department Apparatus Access and Water Supply

Background

1. On December 11, 2008, the Council received proposed Regulation 29-08, *Fire Safety Code – Fire Department Apparatus Access and Water Supply*, from the Executive.
2. The Council must review Regulation 29-08 under method (2) of Section 2A-15 of the County Code.
3. On February 3, 2009, the Council adopted Resolution 16-829, extending the deadline for Council action on Regulation 29-08 to June 30, 2009.
3. The Public Safety and Transportation, Infrastructure, Energy and Environment Committees reviewed Regulation 29-08 on January 29 and March 4 and 26, 2009, and requested certain amendments. The Committees recommended approval with the requested amendments.
4. The Executive amended Regulation 29-08 as the Committees requested, and reissued and re-numbered it Executive Regulation 29-08AM to indicate that it was amended after transmittal to the Council.

Action

The County Council for Montgomery County, Maryland approves the following resolution:

Executive Regulation 29-08AM, *Fire Safety Code - Fire Department Apparatus Access and Water Supply*, is approved.

This is a correct copy of Council action.

Linda M. Lauer, Clerk of the Council

fire&res\reg\29-08am res approval.doc



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08AM
Originating Department Montgomery County Fire & Rescue Service	Effective Date July 1, 2009

MONTGOMERY COUNTY EXECUTIVE REGULATION

FIRE SAFETY CODE – FIRE DEPARTMENT APPARATUS ACCESS AND WATER SUPPLY

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

Issued by: County Executive
Executive Regulation No: 29-08
COMCOR: Division 06

Authority: Montgomery County Code Section 22-13
Council Review: Method (2) under Code Section 2A-15
Register: Vol. 25, No. 9
Effective Date: July 1, 2009

- SUMMARY:** Expedient fire department apparatus access and adequate water supply are essential to the efficient and timely delivery of emergency assistance and fire suppression services. This proposed Regulation establishes the requirements for effective fire department apparatus access and water supply in urban, suburban and rural settings in Montgomery County.
- ADDRESS:** Division Chief Michael Love, Fire Marshal, Montgomery County Fire and Rescue Service, Executive Office Building, 101 Monroe Street, 12th Floor, Rockville, Maryland 20850
- STAFF:** For additional information, contact Assistant Chief Michael Donahue, Office of the Fire Marshal, Montgomery County Fire and Rescue Service, 255 Rockville Pike, 2nd Floor, Rockville, MD 20850. (240) 777-2457. e-mail: Mike.Donahue@montgomerycountymd.gov



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08AM
Originating Department Montgomery County Fire & Rescue Service	Effective Date July 1, 2009

Section 1. Applicability. In accordance with the procedures authorized in Chapter 22, "Fire Safety Code," of the Montgomery County Code (1994), as amended, this Executive Regulation applies to safeguarding life, property and the public welfare from the risks of fire and explosion arising from the improper storage, handling, or use of materials or devices, and from conditions hazardous to life, property and the public welfare in the use or occupancy of structures or lots and adopts, except as amended in this Regulation, the National Fire Protection Association (NFPA) 1141, Standard for Fire Protection Infrastructure for Land Development in Suburban and Rural Areas, 2008 Edition, and NFPA 1142, Standard on Water Supplies for Suburban and Rural Fire Fighting, 2006 Edition.

- a. This regulation applies to all new community and commercial development or redevelopment, road reconstruction, and any changes to existing fire department access.
- b. In any conflict between NFPA 1, Uniform Fire Code, and NFPA 1141 or NFPA 1142, the most stringent requirement must prevail except as otherwise provided in:
 - 1. the Fire Safety Code;
 - 2. this regulation; or
 - 3. performance-based design guidance as defined in paragraph 4.b.

Section 2. Definitions.

- a. **Fire Department Apparatus Access.** Any approved load-bearing, all-weather surfaces, including public, private, or access roads, driveways, parking lots, shoulders, and buffers, whose use is required to access more than one residential dwelling unit or any non-residential occupied building. Not all roadways are required for fire department apparatus access. In addition to these access surfaces, the **Fire Marshal** may require, and must approve, all suitable gates, access boxes, and fire lanes to ensure adequate fire department apparatus access.



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08AM
Originating Department Montgomery County Fire & Rescue Service	Effective Date July 1, 2009

- b. **Fire Lane.** A road or path developed or reserved to allow fire apparatus to pass through congested areas. The Fire Marshal must require and approve all fire lanes on new or existing roads to be clearly marked to prohibit vehicles or obstructions from impeding fire department apparatus access.
- c. **Fire Marshal.** For purposes of this Regulation, the Fire Marshal of the Montgomery County Fire and Rescue Service (MCFRS) includes the Fire Marshal's designees.
- d. **One- and Two- Family Dwellings.** Detached one- and two-family dwellings and attached single-family dwellings (townhomes) not more than three stories in height with a separate means of egress.
- e. **Operating Bay.** Clear and unobstructed fire department apparatus load bearing surface along **fire department apparatus access** that increases operating width to a minimum of 26 feet wide. It may be defined by bollards and accessed via 3 inch mountable curb. The minimum length of an operating bay is 50 feet.

Section 3. Fire Department Apparatus Access.

The **Fire Marshal** must review and approve **fire department apparatus access** for all new development, and any changes made to **fire department apparatus access**. A **fire department apparatus access** plan is required as part of any development plan. Fire department access improvements may be required at the time of road reconstruction, surrounding new development, or redevelopment. The **Fire Marshal** may require at least two **fire department apparatus access** roads into new developments when, in the **Fire Marshal's** opinion, there is substantial risk that a single fire department access road into a community may become impassable.

Section 4. Alternative Application.

The alternative application of performance-based design, as specified in Chapter 5 of NFPA 1, Uniform Fire Code, applies to any **fire department apparatus access** requirement identified in this Regulation.



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number	29-08AM
Originating Department	Montgomery County Fire & Rescue Service	Effective Date	July 1, 2009

- a. Performance-based design is the preferred application in all cases. It is the intent of this regulation to be administered in a manner consistent with Chapter 49 of the Montgomery County Code and its executive regulations. Performance-based design guidance as defined in paragraph 4(b) must be used to resolve any conflicts between this regulation and Chapter 49.
- b. MCFRS must develop and issue a performance-based design guidance document with assistance from the Departments of Permitting Services, Transportation, and Environmental Protection, Montgomery County Planning Board, and design professionals.

Section 5. Width of Fire Department Apparatus Access.

Fire department apparatus access must be at least 20 feet wide, unless specifically excepted in this Regulation, or as approved by the **Fire Marshal**. Clear width may include, but is not limited, to multiple features of the cross-section, such as travel lanes, bike lanes, and load-bearing shoulders. Clear width excludes obstructive features such as, but not limited to, parking lanes and non-mountable curbs.

- a. On-street parking is allowed on one side if the load-bearing **fire department apparatus access** is at least 28-feet wide.
- b. On-street parking is allowed on both sides if the load-bearing **fire department apparatus access** is at least 36-feet wide. The required width may increase with additional roadway features, such as pedestrian refuges.
- c. **Fire department apparatus access** serving one- and two-family dwellings of three stories or less, with no superimposed dwelling units or portions of dwelling units, and having no window sill greater than 27 feet from grade on the same side of the structure as **fire department apparatus access**, may be 26-feet wide and allow parking on one side, if there are 50-foot long **operating bays** at 300-foot intervals. See Figure 1.



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08AM
Originating Department Montgomery County Fire & Rescue Service	Effective Date July 1, 2009

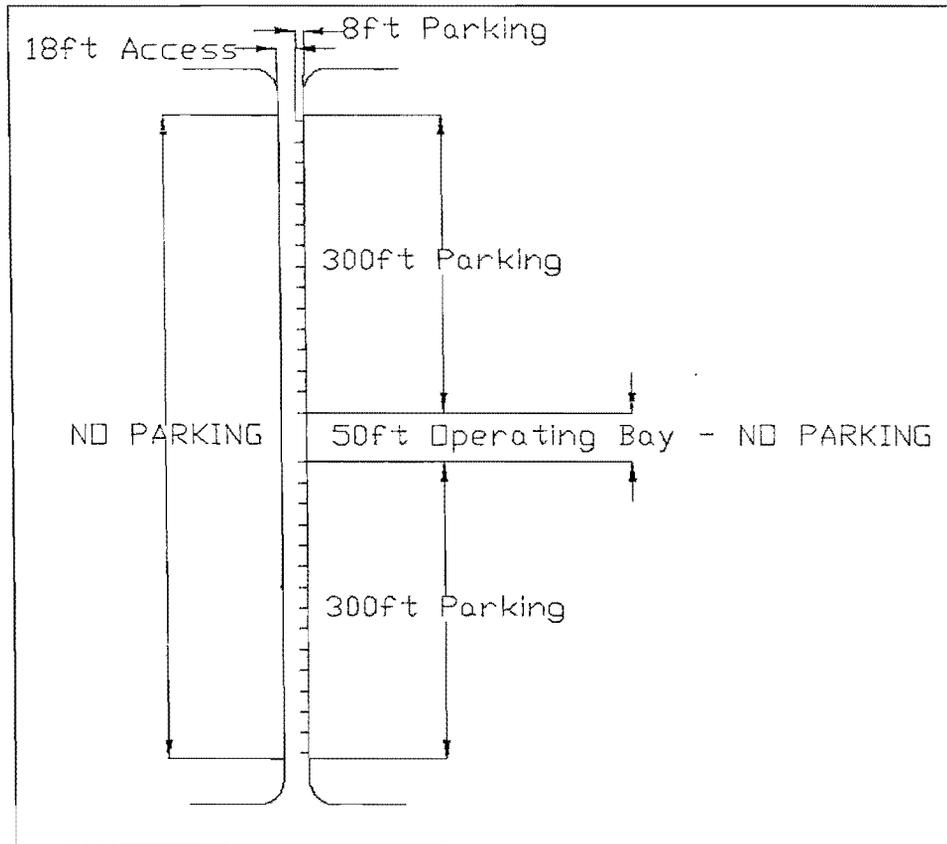


Figure 1. Operating bay application sketch

Section 6. Minimum and Maximum Turning Radii.

The minimum interior turning radius for **fire department apparatus access** is 25 feet. The minimum exterior turning radius for **fire department apparatus access** is 50 feet. This is only required at turning points on fire department apparatus access routes. Performance-based approval of alternative turning radii may be allowed if apparatus movement into opposing lanes of traffic is minimized and unrestricted **fire department apparatus access** is maintained.



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08AM
Originating Department Montgomery County Fire & Rescue Service	Effective Date July 1, 2009

Section 7. Provision of Dead-End Apparatus Turn-Around.

Dead-end **fire department apparatus access** greater than 150-feet long must provide an approved apparatus turnaround. Approved designs include a cul-de-sac at the closed end at least 90-feet in diameter, or a T-turnaround, with each leg of the tee at least 60-feet long and 20-feet wide.

Section 8. When a Building Requires an Automatic Sprinkler System.

- a. A building must be protected throughout by an approved automatic sprinkler system if any portion of its footprint is more than 150 feet of clear and unobstructed walkable grade from a **fire department apparatus access** point.
- b. No portion of a building footprint in a building protected throughout by an approved automatic sprinkler system can be more than 450 feet of clear and unobstructed walkable grade from a **fire department apparatus access** point.

Section 9. Access Requirements for Occupied Structures.

- a. One- and two-family dwellings of three stories or less, with no superimposed dwelling unit or portion of a dwelling unit, must provide access to the occupied interior through a main, side-hinged door, via a clear and unobstructed walkable grade, within 150 feet of **fire department apparatus access**.
- b. One- and two-family dwellings more than three stories, or dwellings with superimposed dwelling units or a portion of a dwelling unit, must provide access to the occupied interior through a main, side-hinged door, via a clear and unobstructed walkable grade, within 50 feet of **fire department apparatus access**.
- c. A non-residential occupied structure must provide access to the occupied interior through a main, side-hinged door, via a clear and unobstructed walkable grade, within 50 feet of **fire department apparatus access**.



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08AM
Originating Department Montgomery County Fire & Rescue Service	Effective Date July 1, 2009

- d. When **fire department apparatus access** to a new building cannot be provided, the **Fire Marshal** may require compensatory actions in the form of additional fire protection features. Compensatory action may include, but is not limited, to upgraded sprinkler protection, onsite water supply, and early notification fire alarm systems.

Section 10. Fire Department Apparatus Access Requirements: Surface, Load-Bearing, Clearance.

- a. At-grade **fire department apparatus access** must have all-weather surface, and must be capable of bearing the heaviest piece of apparatus in the MCFRS fleet at the time of **Fire Marshal** review and approval.
- b. Elevated decks designated as “**fire department apparatus access**” must have all-weather surface, and be load-bearing up to 75 pounds per square inch, or as specified in Chapter 20 of NFPA Standard 1901, Automotive Fire Apparatus, whichever is greater, or as approved by the **Fire Marshal**.
- c. All buildings, parts of buildings, or other obstructions extending over apparatus access must have a minimum of 13.5 feet vertical clearance from the finished driveway surface. Vertical clearance for any overhead obstruction over arterial roadways must be at least 16 feet from the finished surface. This requirement does not preclude the planting of street trees if maintained appropriately for fire department apparatus access.

Section 11. Water Supply Requirements along Fire Department Apparatus Access Routes.

- a. In municipally-supplied areas, hydrants must be spaced not more than 500 feet apart, and within 400 feet from any dead- ends in apparatus travel.
- b. In non-municipally supplied areas, static water sources compliant with NFPA 1142, Water Supplies for Suburban and Rural Firefighting, must be sited not more than one mile travel distance along **fire department**



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08AM
Originating Department Montgomery County Fire & Rescue Service	Effective Date

apparatus access routes. If an acceptable water supply does not exist within one mile travel distance from the furthest part of the subdivision at the time of development:

1. Any residential subdivision of more than one dwelling unit must dedicate an easement along the **fire department apparatus access** route to MCFRS that is appropriate in size for the grading and installation of an underground cistern. An easement may be located outside the boundaries of the subdivision or at another accessible location.
2. Any easement or renewal of an easement must be recorded on the plat or plats of subdivision among the land records of Montgomery County using a model easement provided by the Fire Marshal, and identified as "MCFRS Public Safety Water Supply Easement." Any release of an easement must also be recorded in the land records.
3. If public safety improvements are made on an easement, the improvements must be recorded in the land records and identified as "MCFRS Public Safety Water Supply".
4. Any easement created under this regulation for the purpose of water supply may be released at any time by the Fire Marshal if an alternate, more appropriate site becomes available.
5. If no public safety improvements are made on an easement within 10 years after the easement is first recorded in the land records:
 - a. The Fire Marshal may renew the easement for one additional ten-year term. The grantor of the easement must be notified in writing at least 60 days before the easement is renewed; or
 - b. The Fire Marshal must release the easement.
6. Non-residential development must install a new, or upgrade an existing water supply, that is acceptable to the **Fire Marshal**.



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code -- Fire Department Apparatus Access and Water Supply	Number 29-08AM
Originating Department Montgomery County Fire & Rescue Service	Effective Date July 1, 2009

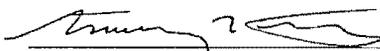
Section 12. Administrative Interpretations. The Fire Marshal will issue administrative interpretations as needed to clarify **fire department apparatus access** requirements for recurrent design issues that are not specifically addressed in this regulation.

Recommended:


 Richard Bowers, Interim Fire Chief
 Montgomery County Fire and Rescue Service

4/22/09
 Date

Approved:

 (acting)
 Isiah Leggett,
 County Executive

6/20/2009
 Date



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08AM
Originating Department Montgomery County Fire & Rescue Service	Effective Date July 1, 2009

MONTGOMERY COUNTY EXECUTIVE REGULATION

FIRE SAFETY CODE – FIRE DEPARTMENT APPARATUS ACCESS AND WATER SUPPLY

MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

Issued by: County Executive
Executive Regulation No: 29-08
COMCOR: Division 06

Authority: Montgomery County Code Section 22-13
Council Review: Method (2) under Code Section 2A-15
Register: Vol. 25, No. 9
Effective Date: July 1, 2009

SUMMARY: Expedient fire department apparatus access and adequate water supply are essential to the efficient and timely delivery of emergency assistance and fire suppression services. This proposed Regulation establishes the requirements for effective fire department apparatus access and water supply in urban, suburban and rural settings in Montgomery County.

ADDRESS: Division Chief Michael Love, Fire Marshal, Montgomery County Fire and Rescue Service, Executive Office Building, 101 Monroe Street, 12th Floor, Rockville, Maryland 20850

STAFF: For additional information, contact Assistant Chief Michael Donahue, Office of the Fire Marshal, Montgomery County Fire and Rescue Service, 255 Rockville Pike, 2nd Floor, Rockville, MD 20850. (240) 777-2457. e-mail: Mike.Donahue@montgomerycountymd.gov



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08AM
Originating Department Montgomery County Fire & Rescue Service	Effective Date July 1, 2009

Section 1. Applicability. In accordance with the procedures authorized in Chapter 22, "Fire Safety Code," of the Montgomery County Code (1994), as amended, this Executive Regulation applies to safeguarding life, property and the public welfare from the risks of fire and explosion arising from the improper storage, handling, or use of materials or devices, and from conditions hazardous to life, property and the public welfare in the use or occupancy of structures or lots and adopts, except as amended in this Regulation, the National Fire Protection Association (NFPA) 1141, Standard for Fire Protection [[in Planned Building Groups, 2006 Edition]] Infrastructure for Land Development in Suburban and Rural Areas, 2008 Edition, and NFPA 1142, Standard on Water Supplies for Suburban and Rural Fire Fighting, 2006 Edition.

- a. This regulation applies to all new community and commercial development or redevelopment, road reconstruction, and any changes to existing fire department access.
- b. In any conflict between NFPA 1, Uniform Fire Code, and NFPA 1141 or NFPA 1142, the most stringent requirement must prevail except as otherwise provided in:
 - 1. the Fire Safety Code;
 - 2. this regulation; or
 - 3. performance-based design guidance as defined in paragraph 4.b.

Section 2. Definitions.

- a. **Fire Department Apparatus Access.** Any approved load-bearing, all-weather surfaces, including public, private, or access roads, driveways, parking lots, shoulders, and buffers, whose use is required to access more than one residential dwelling unit or any non-residential occupied building. Not all roadways are required for fire department apparatus access. In addition to these access surfaces, the **Fire Marshal** may require, and must approve, all suitable gates, access boxes, and fire lanes to ensure adequate fire department apparatus access.



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08AM
Originating Department Montgomery County Fire & Rescue Service	Effective Date July 1, 2009

- b. **Fire Lane.** A road or path developed or reserved to allow fire apparatus to pass through congested areas. The Fire Marshal must require and approve all fire lanes on new or existing roads to be clearly marked to prohibit vehicles or obstructions from impeding fire department apparatus access.
- c. **Fire Marshal.** For purposes of this Regulation, the Fire Marshal of the Montgomery County Fire and Rescue Service (MCFRS) includes the Fire Marshal's designees.
- d. **One- and Two- Family Dwellings.** Detached one- and two-family dwellings and attached single-family dwellings (townhomes) not more than three stories in height with a separate means of egress.
- e. **Operating Bay.** Clear and unobstructed fire department apparatus load bearing surface along **fire department apparatus access** that increases operating width to a minimum of 26 feet wide. It may be defined by bollards and accessed via 3 inch mountable curb. The minimum length of an operating bay is 50 feet.

Section 3. Fire Department Apparatus Access.

The **Fire Marshal** must review and approve **fire department apparatus access** for all new development, and any changes made to **fire department apparatus access**. A **fire department apparatus access** plan is required as part of any development plan. Fire department access improvements may be required at the time of road reconstruction, surrounding new development, or redevelopment. The **Fire Marshal** may require at least two **fire department apparatus access** roads into new developments when, in the **Fire Marshal's** opinion, there is substantial risk that a single fire department access road into a community may become impassable.

Section 4. Alternative Application.

The alternative application of performance-based design, as specified in Chapter 5 of NFPA 1, Uniform Fire Code, applies to any **fire department apparatus access** requirement identified in this Regulation.



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08AM
Originating Department Montgomery County Fire & Rescue Service	Effective Date July 1, 2009

- a. Performance-based design is the preferred application in all cases. It is the intent of this regulation to be administered in a manner consistent with Chapter 49 of the Montgomery County Code and its executive regulations. Performance-based design guidance as defined in paragraph 4(b) must be used to resolve any conflicts between this regulation and Chapter 49.
- b. MCFRS must develop and issue a performance-based design guidance document with assistance from the Departments of Permitting Services, Transportation, and Environmental Protection, Montgomery County Planning Board, and design professionals.

Section 5. Width of Fire Department Apparatus Access.

Fire department apparatus access must be at least 20 feet wide, unless specifically excepted in this Regulation, or as approved by the **Fire Marshal**. Clear width may include, but is not limited, to multiple features of the cross-section, such as travel lanes, bike lanes, and load-bearing shoulders. Clear width excludes obstructive features such as, but not limited to, parking lanes and non-mountable curbs.

- a. On-street parking is allowed on one side ~~[[only]]~~ if the load-bearing **fire department apparatus access** is at least 28-feet wide.
- b. On-street parking is allowed on both sides if the load-bearing **fire department apparatus access** is at least 36-feet wide. The required width may increase with additional roadway features, such as pedestrian refuges.
- c. **Fire department apparatus access** serving one- and two-family dwellings of three stories or less, with no superimposed dwelling units or portions of dwelling units, and having no window sill greater than 27 feet from grade on the same side of the structure as **fire department apparatus access**, may be 26-feet wide and allow parking on one side, if there are 50-foot long **operating bays** at 300-foot intervals. See Figure 1.



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08AM
Originating Department Montgomery County Fire & Rescue Service	Effective Date July 1, 2009

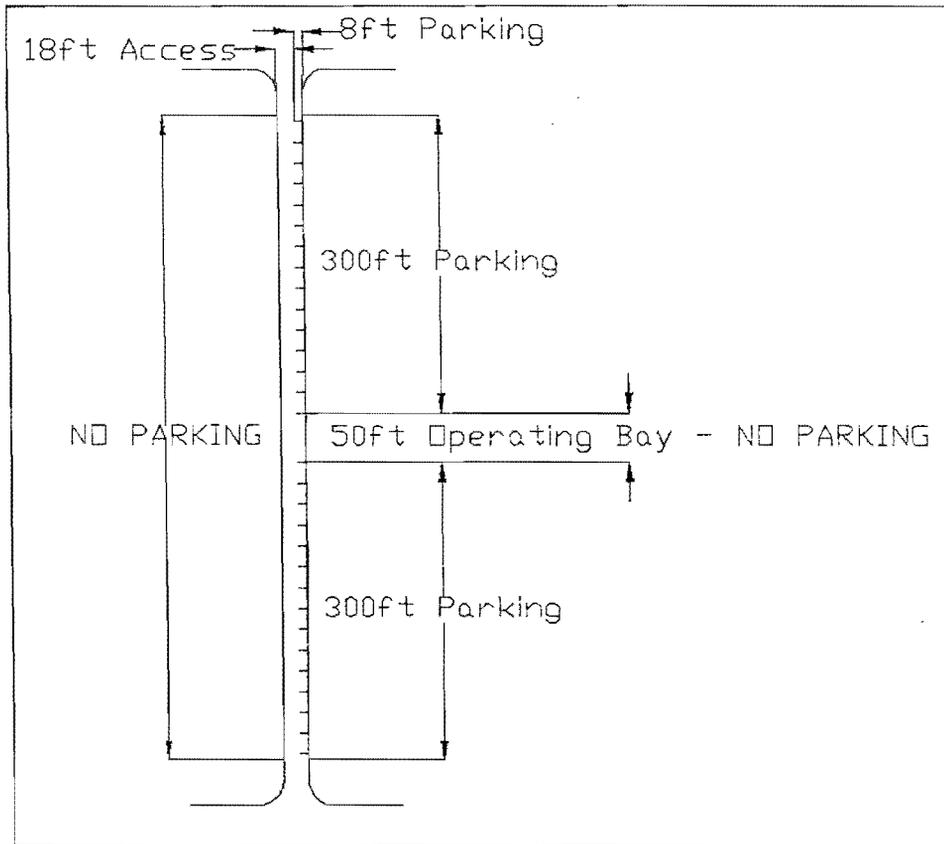
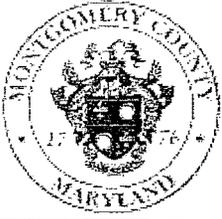


Figure 1. Operating bay application sketch

Section 6. Minimum and Maximum Turning Radii.

The minimum interior turning radius for **fire department apparatus access** is 25 feet. The minimum exterior turning radius for **fire department apparatus access** is 50 feet. This is only required at turning points on fire department apparatus access routes. Performance-based approval of alternative turning radii may be allowed if apparatus movement into opposing lanes of traffic is minimized and unrestricted **fire department apparatus access** is maintained.



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08AM
Originating Department Montgomery County Fire & Rescue Service	Effective Date July 1, 2009

Section 7. Provision of Dead-End Apparatus Turn-Around.

Dead-end **fire department apparatus access** greater than 150-feet long must provide an approved apparatus turnaround. Approved designs include a cul-de-sac at the closed end at least 90-feet in diameter, or a T-turnaround, with each leg of the tee at least 60-feet long and 20-feet wide.

Section 8. When a Building Requires an Automatic Sprinkler System.

- a. A building must be protected throughout by an approved automatic sprinkler system if any portion of its footprint is more than 150 feet of clear and unobstructed walkable grade from a **fire department apparatus access** point.
- b. No portion of a building footprint in a building protected throughout by an approved automatic sprinkler system can be more than 450 feet of clear and unobstructed walkable grade from a **fire department apparatus access** point.

Section 9. Access Requirements for Occupied Structures.

- a. One- and two-family dwellings of three stories or less, with no superimposed dwelling unit or portion of a dwelling unit, must provide access to the occupied interior through a main, side-hinged door, via a clear and unobstructed walkable grade, within 150 feet of **fire department apparatus access**.
- b. One- and two-family dwellings more than three stories, or dwellings with superimposed dwelling units or a portion of a dwelling unit, must provide access to the occupied interior through a main, side-hinged door, via a clear and unobstructed walkable grade, within 50 feet of **fire department apparatus access**.
- c. A non-residential occupied structure must provide access to the occupied interior through a main, side-hinged door, via a clear and unobstructed walkable grade, within 50 feet of **fire department apparatus access**.



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08AM
Originating Department Montgomery County Fire & Rescue Service	Effective Date July 1, 2009

- d. When **fire department apparatus access** to a new building cannot be provided, the **Fire Marshal** may require compensatory actions in the form of additional fire protection features. Compensatory action may include, but is not limited, to upgraded sprinkler protection, onsite water supply, and early notification fire alarm systems.

Section 10. Fire Department Apparatus Access Requirements: Surface, Load-Bearing, Clearance.

- a. At-grade **fire department apparatus access** must have all-weather surface, and must be capable of bearing the heaviest piece of apparatus in the MCFRS fleet at the time of **Fire Marshal** review and approval.
- b. Elevated decks designated as “**fire department apparatus access**” must have all-weather surface, and be load-bearing up to 75 pounds per square inch, or as specified in Chapter 20 of NFPA Standard 1901, Automotive Fire Apparatus, whichever is greater, or as approved by the **Fire Marshal**.
- c. All buildings, parts of buildings, or other obstructions extending over apparatus access must have a minimum of 13.5 feet vertical clearance from the finished driveway surface. Vertical clearance for any overhead obstruction over arterial roadways must be at least 16 feet from the finished surface. This requirement does not preclude the planting of street trees if maintained appropriately for fire department apparatus access.

Section 11. Water Supply Requirements along Fire Department Apparatus Access Routes.

- a. In municipally-supplied areas, hydrants must be spaced not more than 500 feet apart, and within 400 feet from any dead- ends in apparatus travel.
- b. In non-municipally supplied areas, static water sources compliant with NFPA 1142, Water Supplies for Suburban and Rural Firefighting, must be sited not more than one mile travel distance along **fire department**



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08AM
Originating Department Montgomery County Fire & Rescue Service	Effective Date July 1, 2009

apparatus access routes. If an acceptable water supply [[is not available]] does not exist within one mile travel distance from the furthest part of the subdivision at the time of development:

1. Any residential [[development]] subdivision of more than one dwelling unit must dedicate an easement along the fire department apparatus access route to MCFRS that is appropriate in size for the grading and installation of an underground cistern. An easement may be located outside the boundaries of the subdivision or at another accessible location.
2. Any easement or renewal of an easement must be recorded on the plat or plats of subdivision among the land records of Montgomery County using a model easement provided by the Fire Marshal, and identified as "MCFRS Public Safety Water Supply Easement." Any release of an easement must also be recorded in the land records.
3. If public safety improvements are made on an easement, the improvements must be recorded in the land records and identified as "MCFRS Public Safety Water Supply".
4. Any easement created under this regulation for the purpose of water supply may be released at any time by the Fire Marshal if an alternate, more appropriate site becomes available.
5. If no public safety improvements are made on an easement within 10 years after the easement is first recorded in the land records:
 - a. The Fire Marshal may renew the easement for one additional ten-year term. The grantor of the easement must be notified in writing at least 60 days before the easement is renewed; or
 - b. The Fire Marshal must release the easement.
6. Non-residential development must install a new, or upgrade an existing water supply, that is acceptable to the Fire Marshal.



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Fire Safety Code – Fire Department Apparatus Access and Water Supply	Number 29-08AM
Originating Department Montgomery County Fire & Rescue Service	Effective Date July 1, 2009

Section 12. Administrative Interpretations. The Fire Marshal will issue administrative interpretations as needed to clarify **fire department apparatus access** requirements for recurrent design issues that are not specifically addressed in this regulation.

Recommended:

Richard Bowers, Interim Fire Chief
Montgomery County Fire and Rescue Service

Date

Approved:

Isiah Leggett,
County Executive

Date

Exec Reg



MD
CE
SBF
LL
CO
has {

OFFICE OF THE COUNTY EXECUTIVE
ROCKVILLE, MARYLAND 20850

Isiah Leggett
County Executive

MEMORANDUM

June 22, 2009

049804

Method 2

2009 JUN 22 AM 11:23

COUNTY EXECUTIVE
MONTGOMERY COUNTY
COUNCIL

TO: Phil Andrews, President
Montgomery County Council

FROM: Isiah Leggett, County Executive  (Acting)

SUBJECT: Executive Regulation 29-08AM
Fire Safety Code – Fire Department Apparatus Access and Water Supply

The purpose of this memorandum is to transmit for the County Council's approval Executive Regulation 29-08AM, Fire Safety Code – Fire Department Apparatus Access and Water Supply. Notice of the proposed regulation was published in the Montgomery County Register on September 1, 2008, Volume 25, Issue 9. Notice of a Public Hearing for the proposed regulation was also published in the Montgomery County Register on September 1, 2008. The Hearing was held on October 3, 2008.

Executive Regulation 29-08 was transmitted to the County Council on December 11, 2008. The proposed regulation 29-08AM clarifies several requirements that already exist in the Maryland State Fire Prevention Code; specifically permits the use of performance-based design to meet the intent of the code as originally identified before the Montgomery County Council in October, 2006; and adopts into the Montgomery County Fire Safety Code the National Fire Protection Association (NFPA) 1141, *Standard for Fire Protection Infrastructure for Land Development in Suburban and Rural Areas, 2008 Edition* and NFPA 1142, *Standard on Water Supplies for Suburban and Rural Fire Fighting, 2006 Edition*.

Prior to publication in the Montgomery County Register, the proposed regulation was distributed to the entire Road Code Stakeholders Work Group. Pre- and post-publication comments were received from the Department of Transportation (DOT), the Department of Permitting Services (DPS) and the Maryland National Capital Park and Planning Commission (MNCPPC), Montgomery County Planning Board. DOT and DPS comments were mostly procedural and coordination of requirements. The Planning

Phil Andrews, President
Page Two

Board requested that we convene a multi-agency work group to study and make recommendations on the regulation's impacts, add specific language regarding exceptions and Fire Marshal discretion, clarify driveway requirements, consider parking on 26-foot wide roadways, application to in-fill development, define all-weather surfaces, define easement sizes for water supply cisterns and require MNCPPC notification when purchasing larger vehicles. No comments were received regarding the water supply requirements.

MCFRS staff met DOT, DPS, MNCPPC and Council staff on several occasions during September, October, and following months to reach mutually acceptable and enforceable language. As a result of these meetings, definitions were added for One and Two-Family Dwellings and Operating Bays. Fire department apparatus access plans will be required as part of the development submittal process, a performance-based option was included to allow for narrower streets in certain circumstances, an allowance was made for street trees, and a section was added that provides for administrative interpretation for recurrent problems that are not specifically addressed in the regulation language.

The proposed regulation, Executive Regulation 29-08AM, Fire Safety Code – Fire Department Apparatus Access and Water Supply, will provide a flexible framework that can be applied to ensure adequate fire department apparatus access and water supply while considering other Montgomery County priorities, such as community design, historic preservation, environmental impact and preserving rural character.

I look forward to the Council's action on this important matter. If there are any questions, please contact Assistant Chief Michael Donahue at 240-777-2470.

Attachments

March 26 Worksessions

For the March 26 worksession, the Committees will review the staff draft. Executive and Planning Board staff will be available to discuss the proposed changes in more detail and respond to the Committees' questions. If the Committees decide that the issues regarding this regulation have been sufficiently addressed, the Committees can develop a recommendation to the Council. If the Committees recommend approval of the staff draft, MCFRS staff will request that the Executive issue an amended regulation for Council approval.



Amendments in the Staff Draft

Amendments in response to the Committees' requests and additional amendments recommended by MCFRS, Planning Board, and Council staff are described below.

- At MCFRS's recommendation, amended Section 1 to adopt NFPA 1141, 2008 edition, instead of the 2006 edition. The State has not yet adopted the 2008 edition. According to MCFRS staff, the 2008 edition is more comprehensive than earlier editions of NFPA 1141, and no less stringent than the current State code requirements. In their opinion, the County will continue to comply with State requirements if it adopts the 2008 edition.
- At Council staff's request, added a new Section 1(a) to clarify that the regulation applies to all new development or redevelopment, road reconstruction, and any changes to existing fire department access. (© 2)
- At the Committee's request, added a new section 1(b) to clarify that if there is a conflict between NFPA 1 and NFPA 1141 or 1142, the more stringent requirement will prevail except where otherwise provided in the Fire Safety Code or amended in this regulation. (© 2)
- At Council staff's request, moved up Section 11, Alternative Application, to become Section 4. MCFRS staff added a sentence (shown with double underlines) to the amended language that was tentatively approved by the Committees on March 4 (single underline).

Section 4. Alternative Application. The alternative application of performance-based design, as specified in Chapter 5 of NFPA 1, Uniform Fire Code, applies to any fire department apparatus access requirement identified in this Regulation.

a. Performance-based design is the preferred application in all cases. It is the intent of this regulation to be administered in a manner consistent with Chapter 49 of the Montgomery County Code and its executive regulations. Performance-based design guidance as defined in paragraph 4(b) will be used to resolve any conflicts between this regulation and Chapter 49.

- At the Committee's request, added a new Section 4(b) requiring MCFRS to develop and issue a performance-based design manual with assistance from the Departments of Permitting Services, Transportation, and Environmental Protection, the Montgomery County Planning Board, and design professionals. (© 4)
- In Section 6, incorporated amended language that was tentatively approved by the Committees on March 4 saying that minimum turning radius requirements apply only at turning points on fire department apparatus access routes. (© 5-6)
- At Planning Board staff's request, MCFRS staff included a change (shown with double brackets) to amended language in Section 11(b) that was tentatively approved by the Committees on March 4.

Section 11. Water Supply Requirements along Fire Department Apparatus Access Routes.

- b. In non-municipally supplied areas, static water sources compliant with NFPA 1142, Water supplies for Suburban and Rural Firefighting, must be sited not more than one mile travel distance along fire department apparatus access routes. If an acceptable water supply [is not available] [[or easement for an underground cistern]] does not exist within one mile travel distance from the furthest part of the subdivision at the time of development:

Planning Board staff recommended deleting the reference to an easement for an underground cistern to enable the Fire Marshal to designate a different easement if a better site becomes available when later development occurs.

- At the Committee's request, added language to Section 11(b)(1) stating that an easement may be located outside the boundaries of a subdivision or at another accessible location. (© 8)
- To clarify what would happen to an easement over time, added to Section 11(b), paragraphs 2-5, which state that an easement lasts for 10 years, and, if a water cistern is not installed, may either be renewed by the Fire Marshal for one additional 10-year term or released at the end of the first ten years. Also added requirements to record in land records any new, renewal, or release of an easement. (© 8)

Committee Requests that have not been Addressed to Date

At the March 4 worksession, the Committees requested that MCFRS and Planning Board staff work together to address the following issues:

- Consider revising the regulations to encourage the use of higher quality construction materials or a higher level of sprinkler protection to reduce the amount of pavement needed.

Response: MCFRS staff agrees that encouraging the use of higher quality construction materials is important, but feels that this issue would overlap with the requirements in building and other codes. They would like to work on this as a longer term issue in consultation with the Department of Permitting Services.

- Consider relaxing road width/parking requirements if there is more than one point of access for a street, and in lower density developments.
- Address the width requirements for shared driveways which do not have the same demands for access as neighborhood streets.
- Consider including standard situations or waivers in the regulation to reduce the amount of case-by-case review that is needed.
- To the extent that pavement reduction measures could be incorporated, consider including them in the regulation.

Response: MCFRS staff recommends addressing these issues through the design manual that is required in the regulation.

This packet contains:

circle #

MCFRS staff draft of amended Regulation 29-08	1
MCFRS, M-NCPPC, and DPS responses to questions	10
MCFRS responses to Council staff questions, 1/29/09	18
Executive's transmittal of Regulation 29-08	22
Fiscal Impact Statement	24
Draft approval resolution	26

Additional Staff Amendments to Regulation 29-08

At Planning Board staff's request, add to the end of Section 1(b) the wording: "or as provided in performance-based design guidance as defined in paragraph 4(b)." As edited by Council staff, the final version would read as follows:

Section 1. Applicability.

- b. In any conflict between NFPA 1, Uniform Fire Code, and NFPA 1141 or NFPA 1142, the most stringent requirement must prevail except as otherwise provided in:
 - (1) the Fire Safety Code;
 - (2) this regulation; or
 - (3) performance-based design guidance as defined in paragraph 4(b).

At Planning Board staff's request, delete the word "only" from the first line of Section 5(a):

Section 5. Width of Fire Department Apparatus Access.

- a. On-street parking is allowed on one side ~~[[only]]~~ if the load-bearing **fire department apparatus access** is at least 28-feet wide.

At Council staff's request, change "will" to "must" in the last sentence of Section 4(a):

Section 4. Alternative Application.

- a. Performance-based design is the preferred application in all cases. It is the intent of this regulation to be administered in a manner consistent with Chapter 49 of the Montgomery County Code and its executive regulations. Performance-based design guidance as defined in paragraph 4(b) ~~[[will]]~~ must be used to resolve any conflicts between this regulation and Chapter 49.

QUESTIONS

Regulation 29-08, Fire Safety Code – Fire Department Apparatus Access and Water Supply

General

1. **MCFRS:** How does Regulation 29-08 relate to the current State Fire Safety Code? The current County Fire Safety Code? Which provisions of the regulation are the same as in the current State and County Fire Codes? Which are different?

MCFRS response: Regulation 29-08 is intended to be a consolidation of current State Fire Safety Code, County Fire Safety Code and the regulations adopted there under as they apply to fire department vehicular access and firefighting water supply. The provisions that differ from strict interpretation of code provide better defined parameters of performance based design for both road design and water supply.

2. **M-NCPPC:** If the requirements in Regulation 29-08 conflict with development design standards, which rules take precedence?

M-NCPPC response: We would generally expect the requirements in the proposed regulations to take precedence over any development design standards that are not specifically required by another law or regulation.

If a conflict occurs between requirements of law, they must be worked out between the agencies who have the authority to implement the specific laws using any waiver provisions available to either one. As part of the Development Review Committee process, other agencies can give input but have no authority over the resolution of the conflict.

If the conflict is between the requirements of these regulations and a non-regulatory design standard, the NFPA-1 requirements and these regulations take precedent. These regulations would give the Fire Marshall or designee authority to approve non-prescriptive designs for fire department apparatus access (Section 11). Other agencies can give input, but have no authority over their decision. The Planning Board requested that FRS incorporate alternatives for certain situations into the regulations rather than handling everything case by case, but FRS feels there are too many variables involved in the ultimate decisions to allow this.

The Alternative Application provisions do not apply to the requirements for cisterns under Section 10. The Planning Board stated that waivers of this requirement should be possible in certain smaller residential lot situations, but FRS does not support this.

Road Code

3. **M-NCPPC & MCFRS:** How does the 20' clear path requirement in the proposed regulation square with the following guidance, in the Smart Transportation Guidebook published late last year jointly by the Pennsylvania and New Jersey Departments of Transportation, (<http://www.dvrpc.org/asp/pubs/reports/08030A.pdf>) which states:

9.4.2 Context Sensitive Streets and the Fire Code

An obstacle to the construction of context sensitive streets has been the adoption of the National Fire Code (NFC) in its entirety by municipalities. The NFC recommends a 20 ft. clear path on all streets. While this width is virtually always achievable on arterial and collector streets, on local streets this provision contradicts the AASHTO Green Book, ITE *Neighborhood Street Design Guidelines*, and other planning and engineering best practices. If literally applied, it would consign to obsolescence one of the most popular local street types, the 24 to 26 ft. local street with parking on both sides. There is no indication that traditionally narrow local streets have contributed to deaths or injuries from impeding emergency responses. Particularly since narrow streets enhance safety and community life by reducing the incidence of speeding, the language on 20 ft. clear paths on local streets should not be adopted by municipalities. Instead, municipalities should rely on guidance from AASHTO or ITE. [pp.80-81]

M-NCPPC Response: The NJDOT PennDOT Smart Transportation Guidebook recommends that municipalities not adopt the National Fire Code, however Montgomery County has already done this. To promote adoption of NFPA-1, FRS stated that this action would make them the party responsible for waivers from the Code, rather than the State Fire Marshall. They said that they would be more flexible than the State had been.

The proposed regulations would permit, but not require this flexibility. As the aforementioned Guidebook states, the greatest impact would be on the most common, low-volume residential streets. The Planning Board requested that FRS provide a list of standard waivers from the Code, which FRS calls exceptions, but FRS does not want to do this.

MCFRS Response: MCFRS' representation at the national level with the Congress for New Urbanism indicates that the current design guidelines were achieved without any fire department input. While there is no indication that traditionally narrow local streets have contributed to deaths or injuries from impeding emergency responses, neither is there evidence to the contrary. While the referenced standards may address planning and engineering best practices, they ignore fire department best practices.

4. **M-NCPPC & MCFRS:** How does the 25' minimum inside curb radius requirement in the proposed regulation square with the following guidance in the Smart Transportation Guidebook, which states:

In the urban core and town center contexts, where pedestrian activity is often intense, the smallest possible curb radii should be used. As indicated in the AASHTO Green Book, a curb return radius of 10 to 15 feet is used at most urban intersections, partly to minimize pedestrian crossing distances. This range is recommended here for use on most local streets, as well as collector and arterial roadways in urban areas with moderate volumes and a large percentage of passenger vehicles. Passenger vehicles can navigate curbs of this radius with little encroachment into other lanes. The relative infrequency of single unit trucks, school buses and possibly transit buses would not usually warrant construction of a larger curb radius. Curb radii of 15 to 25 ft. are recommended for these roadway types where encroachment is unacceptable. [p. 57]

MCFRS response: The problem becomes designing shared pedestrian and vehicular space. The Smart Transportation Guidebook states "the relative infrequency of single unit trucks, school buses and possibly transit buses would not usually warrant

construction of a larger curb radius.” Montgomery County is a public service oriented community that relies heavily on public transportation to support transit oriented development and possesses population demographics that create a high demand for emergency services. These factors among others increase the potential frequency of vehicle/pedestrian conflicts in shared spaces such as intersection corners constructed with insufficient turning radii.

5. **M-NCPPC:** How do the prescriptive road widths and turning radii in Regulation 29-08 differ from the required road widths and turning radii in the Road Code?

M-NCPPC response to Questions 4 and 5: Section 5 of the proposed regulations actually require a 25’ minimum interior *turning* radius rather than a 25’ inside curb radius. It would be possible to have a 10’ or 15’ curb radius and accommodate a 25’ interior turning radius if there is a parking lane and/or if there is more than one receiving lane. This section allows performance-based criteria to be used if fire apparatus movement into opposing lanes of traffic is minimized.

This is normally not a concern on Secondary and Tertiary residential streets because there is no centerline stripe. However, because this section also requires a minimum *exterior* turning radius of 50’ and the normal width of these streets is 26’, a 25’ radius curb would be the minimum allowed unless the apparatus moves to the left side of the street before making the turn. (This would require that parking be restricted in this area.) Note that these requirements would apply for the fire department apparatus access routes, not every street, so the minimum 25’ curb radius could be limited to the turning points on these routes.

6. **M-NCPPC:** How much additional pavement would be required if the prescriptive road widths from Regulation 29-08 are applied?

M-NCPPC response: There is nothing in 29-08 that would definitively require additional pavement for public roads. In terms of a County action, that was the result of adopting NFPA-1, although at least on paper, the County’s adoption would have been no different than the State’s earlier adoption. It’s the application that counts. Whereas 29-08 would not require additional pavement for public roads, the regulations could be revised to promote having less pavement.

As a result of adopting NFPA-1, there are additional pavement requirements for private driveways. When private driveways are shared, they must be a minimum of 20 feet in width for the distance that they are shared. And if that distance is greater than 150’ from the public street access point, a paved fire department turnaround must also be provided.

7. **MCFRS:** If the prescriptive road widths and turning radii in Regulation 29-08 conflict with development design standards, how would performance-based design be used to address the conflicts? Please give examples of performance-based alternatives to the prescriptive requirements.

MCFRS response: Performance based design is currently accepted by code and has been reviewed and enforced by MCFRS staff since 2005 in order to eliminate conflicts with development design standards. Performance based alternatives can include rolled curbs in low speed, low pedestrian traffic areas, non-pavement load bearing alternative surfaces such as grass pavers, and operational bays.

M-NCPPC response: The fire access routes could be laid out in such a way to minimize having excessively large intersections. The block length in a grid pattern development can be kept short so that the fire access route stays on the main (wider) roads. As shown in Figure 1 in Section 4, operating bays can be designated to minimize widening of whole streets; a similar technique can be used to provide such bays in the median of divided streets to accommodate fire routes. For private driveways, the minimum 20 foot width requirement could be reduced when crossing environmentally sensitive areas and for the middle sections of longer driveways.

8. **MCFRS & M-NCPPC:** Will the use of performance-based design lengthen the development review process? Will the Fire Marshal or developers need additional resources to complete a performance-based development review?

MCFRS response: The development review process will take no longer than it has in the past. Performance based design has been reviewed by the Office of the Fire Marshal since 2005. Staffing was increased in 2006 to accommodate the needs of the developers. There are no additional resources required.

M-NCPPC response: Performance-based design does lengthen the development review process. When there is no specific rule to follow, there is always going to be more time spent in the back and forth review of alternatives. As currently applied, an alternative review by FRS (and by other agencies who have authority to grant variations of other sections of the Code) requires a separate review after the Development Review Committee meets.

9. **MCFRS:** What assurance is there that performance-based design will be implemented in a consistent and fair manner from one project to the next?

MCFRS response: Prescriptive code set forth the minimum standard. Performance based design provides the developer options to meet that standard. At no time can a reviewer require measures in excess of prescriptive code which is in accordance with state and county law.

10. **MCFRS:** What assurance is there that performance-based requirements will be applied consistently throughout a project, and not change mid-way through the project?

MCFRS response: Approved performance based measures are designed to meet the intent of prescriptive code and will never become more restrictive through the course of a project. However, performance based design review are also no different than any other review. A reviewer's oversight does not exempt a developer from building according to code.

11. **MCFRS:** How will a development applicant know that they must choose either a prescriptive or a performance-based review at the beginning of the review, and that the selection cannot be changed once the review begins?

MCFRS Response: Performance based design is presented as an option in NFPA 1, adopted in 2006, Regulation 29-08 and Regulation 7-06AM. The selection can be changed at any time during the review process.

M-NCPPC response: Since conflicts are sometimes not fully identified until the Development Review Committee meets, there should be some flexibility in applying these regulations that allows an applicant to decide to go to performance based review at any time.

Water Supply

12. **MCFRS:** What is MCFRS' overall plan for water supply in non-hydranted areas? How will water on wheels be coordinated with the installation of underground water tanks?

MCFRS response: The overall plan for water supply in non-hydranted areas is to provide sufficient static water supply to meet fire flow requirements for all developed areas of the county. Water-on-wheels is the delivery method; cisterns and other static water sources provide the water.

M-NCPPC response: According to the regulations, all new development must either provide a cistern easement or install and dedicate a cistern regardless of the limitations on the developing site that may conflict with this requirement. It would be better to have an overall plan that targets particular sites. At a minimum, consideration should be given to having an expiration date for easements on residential property. That way, better sites can be targeted as the opportunities arise and there won't be easements on property that will never be used.

13. **MCFRS:** How much fire damage would be prevented by underground water tanks versus using water on wheels?

MCFRS response: Level of fire damage is highly dependent on the fire department's ability to deliver sufficient water flow in a timely fashion. Currently static water supplies are spaced widely enough apart that the number of tankers required to produce that flow exceeds MCFRS' fleet capabilities. Mutual aide from neighboring counties is required for every tanker task force dispatched. MCFRS has never had the opportunity to operate with static water sources close enough to reduce the number of tankers and determine a saving in fire damage.

14. **MCFRS:** When will the Fire Marshal determine where underground tanks should be located? What criteria will be used?

MCFRS response: It is part of an ongoing effort to improve our ISO rating. Underground tanks will be strategically located to maximize use of natural water sources. Tank locations will be a function of existing sources (including natural water supplies) and surrounding development type and size.

15. **MCFRS:** Would easements for underground tanks be required in the Agricultural Reserve?

MCFRS response: Easements for underground tanks in the Agricultural Reserve will be avoided to the greatest extent possible. We are exploring opportunities to locate tanks on existing county property or on outlots in order to avoid increasing residential lot size in the Agricultural Reserve areas.

16. **MCFRS:** Is it reasonable to require residential developers to provide easements for underground water tanks if it is unclear whether a tank will be needed on their property?

MCFRS response: Yes. The alternatives are to lose opportunity for tank placement where it is most advantageous or to resort to condemnation at a later time. Easements that are not needed will be abandoned at a later date.

17. **MCFRS:** What would be the exterior dimensions of a 30,000 gallon underground water tank? Would tanks with more capacity be required for higher density development? If so, how much larger would they be?

MCFRS response: The exterior dimensions of a 30,000 gallon tank vary with the manufacturer. They are typically in the range of 55 ft x 10 ft. A 30,000 gallon tank is the largest required by the Office of the Fire Marshal for residential development.

18. **MCFRS:** What is the cost for an underground tank system? How and when would the County develop an estimated cost for an underground tank CIP project?

MCFRS response: The average cost for an underground storage tank is \$100,000. The estimated cost for a CIP project would be based on development costs that could be shifted to the private sector. We currently anticipate the total CIP project cost to range anywhere from \$1.5M to \$4.5M and the cost would be spread out over multiple years as development progresses.

19. **MCFRS & M-NCPPC:** How far below the surface would an underground water tank be buried? Would it interfere with drainage or nutrient management plans in agricultural areas?

MCFRS response: The underground storage tank should be placed such that there is no less than 3 ft of cover.

M-NCPPC response: Given the Planning Board's desire to limit the size of residential lots in the agricultural reserve to the smallest size necessary to provide wells and septic, any necessary cistern easements will have to be located in the farm remainder portion of the site. However, impacts on drainage or nutrient management plans should be minimal given the desire to locate the easements along public roads rather than within the farm.

20. **MCFRS & M-NCPPC:** How would the installation of an underground water tank affect above-ground uses of land, such as farming, houses, parking?

MCFRS response: Soil disturbance that would interfere with the tank would not be permitted, but shallow uses are not problematic.

M-NCPPC response: On-lot cistern easements for smaller septic lots may affect the location of houses and driveways. If a cistern easement cannot be accessed from the public street, there would be a need for an access driveway and vehicle turnaround that will also limit the possible locations for the house and yard area.

21. **DPS:** How would the installation of an underground water tank affect underground uses, such as septic systems? (See DPS response to Question 22.)

22. **M-NCPPC & DPS:** How would the easement for an underground water tank be coordinated with other easements and elements in addition to buildings that must be sited on a lot, for example, septic fields, utilities/utility easements, wells?

M-NCPPC response: It is our understanding that septic, ingress/egress and utility easements will not be permitted to overlap with cistern easements. When cistern easements are located adjacent to a public road right-of-way, the required 10' public utility easement will have to be routed around the cistern easement and further into the lot. Given the competition for space that is likely to occur on smaller lots with septic and wells, a conceptual grading plan is probably going to be required of the applicants for some cisterns to determine how much area outside the actual tank needs to be preserved for future installation.

DPS response: DPS (Well & Septic) would require a setback of 20 feet (min) between and septic system and a buried water tank. The same setback would pertain to individual water wells.

Other jurisdictions that require such measures typically place these tanks off the lots either in an easement dedicated to DFRS or in a "public" area.

23. **M-NCPPC:** Would the requirement for an easement for an underground water tank lead to the need for a larger lot?

M-NCPPC response: It seems likely that additional acreage will be needed within the smaller well and septic lots to avoid conflicts between cisterns and the driveway, septic and well locations. If the onsite topography is not favorable, these impacts will be greater because of the grading that will be needed to install a cistern.

24. **MCFRS & M-NCPPC:** When did the Fire Marshall begin enforcing the requirement for an easement for an underground water tank? What is the legal basis for requiring these easements? How many easements have been incorporated into new development to date? What has been the experience for the developers so far?

MCFRS response: The Fire Marshal began enforcing the requirements for an easement on July 23, 2007 due to consensus meeting that included design professionals, developers, MNCBIA, and the Office of the Fire Marshal. It was determined at that time that requiring actual cistern installation for small development as required by code presented undue hardship to the developer and significant additional dwelling unit cost to the buyer. Accepting easements with the intention of later installing cisterns through a county CIP project was determined to be a more viable option. NFPA 1, as adopted by the county in 2006 requires that adequate fire protection water be provided at time of development. To date 4 easements have been approved and accepted.

M-NCPPC response: To date, two subdivision plans have been approved that include cistern easements: Burton Woods, a 106-acre site in the RE-2 zone with 21 lots approved so far and the potential for 5 additional lots; and Oak Grove, a 6.6-acre site in the RE-2 zone with 2 lots. There are several other pending subdivision plans that would need to provide easements per the regulations, and one pending commercial site that would have to install a cistern. There were no issues raised by the applicant for Burton Woods, but

the Oak Grove applicant was strongly opposed to granting an easement and there was some delay in the review while an acceptable location was worked out.

25. **MCFRS:** What is the basis for requiring that residential development of more than one dwelling unit must dedicate an easement for an underground water tank? Could the number of units be increased for each tank?

MCFRS response: The basis for requiring residential development of more than one dwelling unit to dedicate an easement for an underground storage tank originated with the NFPA 1 requirement that firefighting water supply be provided at time of development regardless of development size. Yes. We are currently in discussions with MC-MNCPPC to explore this option.

26. **MCFRS:** Which other jurisdictions require that developers provide either easements or underground water tanks for residential development? What do they require?

MCFRS response: No other jurisdiction requires easements. Carroll and Baltimore counties have required the installation of cisterns for residential development.

27. **MCFRS:** For non-residential development, when did the Fire Marshal begin enforcing the requirement for the developer to install a new or upgrade an existing water supply? What is the legal basis for these requirements?

MCFRS response: We are unsure when the Fire Marshal began enforcing the requirement for a developer to install a new or upgrade an existing water supply for non-residential development. It has been a requirement in NFPA 1 since 2001.

28. **M-NCPPC:** How many non-residential developers have been required to meet new/expanded water supply requirements to date? What has been their experience?

M-NCPPC response: It is our understanding from the applicant that the financial impact of actually installing a cistern could lead to a withdrawal of the only pending commercial application that is affected by the regulations (a small fence company).

29. **M-NCPPC:** Are these non-residential water supply requirements substantially increasing the cost of new projects, the amount of land needed, or the time needed for project approval?

M-NCPPC response: Yes, in the one non-residential project currently pending.

Questions

Regulation 29-08, Fire Safety Code – Fire Department Apparatus Access and Water Supply

Fire Department Apparatus Access

1. Section 3, Fire Department Apparatus Access, requires that the Fire Marshal review and approve fire department apparatus access for all new development and any changes made to fire department apparatus access. It says further that “Fire department access improvements may be required at the time of road reconstruction, surrounding new development, or redevelopment.”

Please explain in more detail when fire department apparatus access reviews would be triggered for existing roads or development.

Fire department apparatus access reviews are triggered by the Montgomery County's MNCPPC Development Review Committee process. Alterations to existing roads are implemented on a case by case basis depending on extent of redevelopment.

2. When would the Fire Marshal have discretion to use performance-based alternatives to meet fire department apparatus access requirements?

All designs originate with a design professional. At the request of design professionals and in response to context sensitive community needs the Fire Marshal has the discretion to review performance-based options to meet fire department apparatus access requirements based on 2003 NFPA 1 (adopted by Montgomery County in November 2006) Chapter 5 Performance-Based Option.

3. What standards or guidelines serve as the basis for the Fire Marshal to adopt performance-based alternatives for clear width or turning radii?

Performance-based alternatives for clear width or turning radii are adopted by Montgomery County through Chapters 5 of NFPA 1 and NFPA 101. The Office of the Fire Marshal is staffed and conducts performance-based modeling to evaluate turning radii, widths and other access variables.

4. If the fire department access standards of 20 feet clear width conflict with development goals of narrower streets to promote more walkable neighborhoods or slower local traffic, could performance-based alternatives be used to address these design issues? If so, what alternative options might be available?

The issue that presents itself is aerial ladders require 16' – 18' clearance to set the grounds jack's on operations.

Yes. Alternative options are based on a risk assessment of the community, opportunities to create clear non-conflicting width, and roadway networking, among other design inputs. According to the Congress for New Urbanism (CNU), traditional neighborhood designs or interconnected neighborhood design is a performance-based design. The Montgomery County Fire Marshal sits on the CNU committee tasked with reconciling the needs of various stakeholders at the national level.

Water Supply

Hydranted

The regulation would require that in municipally-supplied areas, hydrants must be spaced no more than 500 feet apart, and within 400 feet from any dead-ends in apparatus travel.

1. What are the current standards for spacing fire hydrants in areas with municipal (including WSSC) water supplies?

Coordination with WSSC in April 2007 lead to hydrant spacing revisions published in the 2008 WSSC Pipe Design Manual. Maximum hydrant spacing is now 500ft. It was previously 800ft in single family residential areas.

2. Under the regulation, would the spacing of existing hydrants have to be modified if they do not meet the new standards?

Spacing of existing hydrants does not need to be modified. Development beyond 500ft from the nearest existing hydrant and adding some length of a private or public water main would be required to add a hydrant at the beginning of the development and every 500ft along the length of the new main.

3. Are the municipal water authorities (including WSSC) in agreement with the new standards?

Yes.

We do not have a response from the City of Rockville, and the town of Poolesville in regards to their position on the new standards.

WSSC 2008 Pipe Design Manual Section 24.d

- 1) *Single family residential areas. Provide five hundred (500) feet maximum spacing between fire hydrants, as measured along an improved roadway, and a maximum*

fire hydrant coverage of four hundred (400) feet from the nearest fire hydrant to any dwelling as measured along an improved roadway (as a fire engine would drive).

- 2) *Townhouses and garden apartments. Provide two hundred fifty (250) to three hundred (300) feet maximum spacing between fire hydrants, as measured along an improved roadway, and a maximum fire hydrant coverage of three hundred (300) feet from the nearest fire hydrant to any dwelling as measured along an improved roadway (as a fire engine would drive).*
- 3) *All other areas. (commercial, industrial, high-rise, elevator type apartments, etc.). Provide two hundred fifty (250) to three hundred (300) feet maximum spacing between fire hydrants, as measured along an improved roadway. Conform to any additional requirements of the Fire Marshall for fire hydrant spacing.*

Non-hydranted

In non-hydranted areas, the regulation would require that residential development of more than one dwelling unit must dedicate an easement along the fire department apparatus access route that is appropriate in size for the grading and installation of an underground cistern.

4. How much land would be required for an easement in a residential development? Please provide a range if the size of the easement would vary with the size or scope of the development.

One important issue is to determine ownership.

Easement size varies based on topographical conditions. Developers are asked to design a location for a 30,000gal underground storage tank and access pulloff for apparatus, approximately 40ft x 75ft. The easement must include sufficient area necessary for installation and final grading.

5. Who would pay for and install the cisterns?

It is currently anticipated that a future Montgomery County Capital Improvements Project will fund the underground storage tank installations. These cisterns will serve pre-existing communities as well as new development. We are exploring alternative funding to include grants.

Water on wheels is a much better option particularly when hydranted infrastructure is down.

6. How have water supply issues in non-hydranted residential areas been handled to date? Were easements and/or cisterns required previously? If so, which existing developments currently have them? If not, how is water provided for firefighting?

Water supply was handled by the LFRDs and operational policies. There was no coordinated county-wide strategic effort. In the non-hydranted areas (ISO class 9) of the county manual firefighting water supply is provided by shuttling water in tankers.

Tank wagon units are an option that also needs to be considered particularly when hydranted infrastructure is down.

7. The regulation would require non-residential development in non-hydranted areas to install a new or upgrade an existing water supply. Presumably, the developer would have to undertake and pay for these improvements. What would be involved in making the improvements, and approximately how much would they cost?

It is incumbent upon developers to provide a code compliant patent all-season water supply of sufficient quantity for fire protection systems and manual firefighting. Cost varies depending on existing conditions and level of proposed development.

8. How have water supply issues in non-hydranted, non-residential areas been handled to date? Have water supply upgrades been required previously? If so, which existing non-residential developments have them? If not, how is water provided for firefighting?

Water supply was handled by the LFRDs and operational policies. There was no coordinated county-wide strategic effort. There were no pre-existing code compliant cisterns on record. As a result of this initiative due to adoption of NFPA 1 in 2003 there is now one code compliant tank in service.



MONTGOMERY COUNTY PLANNING BOARD
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

OFFICE OF THE CHAIRMAN

September 29, 2008

Isiah Leggett
Montgomery County Executive
Executive Office Building
101 Monroe Street
Rockville, MD 20850

RE: MCER NO. 29-08: PROPOSED DEPARTMENT OF FIRE AND
RESCUE SERVICE REGULATION, Fire Safety Code – Fire Department
Apparatus Access and Water Supply

Dear Mr. Leggett:

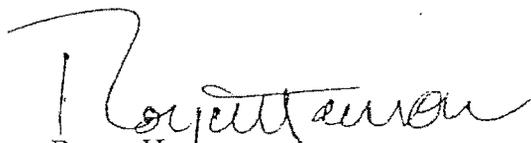
At our regularly scheduled meeting on September 25, 2008, the Planning Board reviewed the proposed Department of Fire and Rescue Service Regulation MCER No. 29-08 with your staff and made the following recommendations:

1. The Executive should convene an interagency working group to develop appropriate provisions to address issues associated with private development and environmental impacts before submitting these regulations to the County Council.
2. Add language that describes the exceptions or discretion that the Fire Marshall has so that applicants and reviewers can understand what non-standard items may be allowed. The waiver criteria should include consideration of other County goals such as preserving/protecting sensitive areas (e.g. historic settings, environmental areas, specimen/champion trees) and preserving rural character.
3. Clarify which driveways need to meet the 20-foot unobstructed width requirement.
4. Consider allowing parking on both sides of 26-foot-wide roads if the street pattern in the area would otherwise allow adequate fire access.
5. Clarify how the fire department access road requirements, including parking prohibitions on existing streets, would be applied to infill development.
6. A definition of an all-weather surface is needed. Grasscrete and other forms of more pervious pavement surfaces should be included.
7. The size of the easement needed for fire department-required cisterns needs to be specified.

8. All Executive departments should be required to identify when they are proposing to purchase larger vehicles than their current fleet and what road changes would be needed to accommodate them.

Thank you for your attention to this matter. We appreciate your staff's help in finding mutually satisfactory solutions and look forward to continuing to work with them. If you have any questions or comments concerning our review, please call Larry Cole at 301-495-4528.

Sincerely,



Royce Hanson
Chairman

cc: Mike Donahue

15



RECEIVED
MONTGOMERY COUNTY
COUNCIL
2008 DEC 11 PM 2:37

MD
CL
SOF
LA

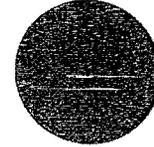
Isiah Leggett
County Executive

OFFICE OF THE COUNTY EXECUTIVE
ROCKVILLE, MARYLAND 20850

039366

MEMORANDUM

December 10, 2008



TO: Phil Andrews, President
Montgomery County Council

FROM: Isiah Leggett, County Executive 

SUBJECT: MCER NO. 29-08, proposed Fire and Rescue Service Regulation – Fire Safety Code – Fire Department Apparatus Access and Water Supply

I am recommending approval of Montgomery County Executive Regulation Number 29-08, Proposed Fire and Rescue Service Regulation – Fire Safety Code – Fire Department Apparatus Access and Water Supply. Notice of the proposed regulation was published in the Montgomery County Register on September 1, 2008, Volume 25, Issue 9. Notice of a Public Hearing for the proposed regulation was also published in the Montgomery County Register on September 1, 2008. The Hearing was held on October 3, 2008.

The proposed regulation clarifies several requirements that already exist in the Maryland State Fire Prevention Code; specifically permits the use of performance-based design to meet the intent of the code as originally identified before the Montgomery County Council in October, 2006; and adopts into the Montgomery County Fire Safety Code the National Fire Protection Association (NFPA) 1141, *Standard for Fire Protection in Planned Building Groups, 2006 Edition* and NFPA 1142, *Standard on Water Supplies for Suburban and Rural Fire Fighting, 2006 Edition*.

Prior to publication in the Montgomery County Register, the proposed regulation was distributed to the entire Road Code Stakeholders Work Group. Pre- and post-publication comments were received from the Department of Transportation (DOT), the Department of Permitting Services (DPS) and the Maryland National Capital Park and Planning Commission (MNCPPC), Montgomery County Planning Board. DOT and

Phil Andrews, President
December 10, 2008
Page Two

DPS comments were mostly procedural and coordination of requirements. The Planning Board requested that the County Executive convene a multi-agency work group to study and make recommendations on the regulation's impacts, add specific language regarding exceptions and Fire Marshal discretion, clarify driveway requirements, consider parking on 26-foot wide roadways, application to in-fill development, define all-weather surfaces, define easement sizes for water supply cisterns and require MNCPPC notification when purchasing larger vehicles. No comments were received regarding the water supply requirements.

MCFRS staff met DOT, DPS and MNCPPC staff on several occasions during September and October and reached mutually acceptable and enforceable language. As a result of these meetings, definitions were added for One and Two-Family Dwellings and Operating Bays. Fire department apparatus access plans will be required as part of the development submittal process, a performance-based option was included to allow for narrower streets in certain circumstances, an allowance was made for street trees, and a section was added that provides for administrative interpretation for recurrent problems that are not specifically addressed in the regulation language.

The proposed regulation, MCER No. 29-08, Fire Safety Code – Fire Department Apparatus Access and Water Supply, will provide a flexible framework that can be applied to ensure adequate fire department apparatus access and water supply while considering other Montgomery County priorities, such as community design, historic preservation, environmental impact and preserving rural character.

I appreciate your prompt consideration of this action.

Attachments



MONTGOMERY COUNTY FIRE AND RESCUE SERVICE

Isiah Leggett
County Executive

Thomas W. Carr, Jr.
Fire Chief

MEMORANDUM

August 21, 2008

TO: Isiah Leggett, County Executive

VIA: Joseph Beach, Director *B. Feenberg for*
Office of Management and Budget

FROM: Thomas W. Carr, Jr., Fire Chief *TWC*

SUBJECT: Request Approval of Executive Regulation No. 29-08, *Fire Safety Code – Fire Department Apparatus Access and Water Supply*

Attached for your signature and publication in the Montgomery County Register is Executive Regulation No. 29-08, *Fire Safety Code – Fire Department Apparatus Access and Water Supply*.

This new regulation amends the Fire Safety Code by establishing public and private roadway and water supply requirements that ensure efficient and timely delivery of emergency assistance and fire suppression services in urban, suburban and rural settings. Critically important to the regulation and development community is the allowance for performance-based design. This provides the development community with the latitude to find the most cost-effective means of achieving adequate fire department access while meeting the fire service need to arrive as expeditiously as possible.

The regulation does not require any additional resources from the Montgomery County Government. Resources are in place and already perform the associated review function. The same applies to the private sector. In fact, this regulation will ease the burden on the private sector by clarifying the expectations for fire department apparatus access and water supply, at the same time permitting flexibility.

If additional information is needed, please call Assistant Chief Mike Donahue
Ext. 7-2470.

TWC:md

Attachments

Office of the Fire Chief

FISCAL IMPACT STATEMENT
Fire Safety Code – Fire Department Apparatus Access and Water Supply
 Title of Regulation

FISCAL SUMMARY: No fiscal impact is anticipated on county personnel or operating costs. Functions associated with regulation are already performed and no additional resources are required.

	<u>Current Fiscal</u> <u>Year FY 09</u>	<u>Next Fiscal</u> <u>Year FY 10</u>
<i>1. Revenues: General Fund</i>	\$ 0	\$ 0
<i>Technology Fund</i>	\$ 0	\$ 0
<i>Total Revenues</i>	\$ 0	\$ 0
<i>2. Personnel Costs: All uniformed positions</i>		
Salaries and Wages (including OT):	\$ 0	\$ 0
Fringe Benefits:	\$ 0	\$ 0
Total Personnel Costs:	\$ 0	\$ 0
<i>3. Operating Expenses:</i>		
List Items:		
Total Operating Expenses:	\$ 0	\$ 0
Capital Outlay:	\$ 0	\$ 0
Technology Fund	\$ 0	\$ 0
<i>Total Expenses (2 + 3):</i>	\$ 0	\$ 0
<i>4. Positions Affected:</i>		
Positions:		
Full-time:	0	0
Part-Time:	0	0
Workyears:		
Full-time:	0	0
Part-Time:	0	0

5. Assumptions and Explanations: See attached memo.

6. Economic Effect on Private Sector: New developments are currently reviewed for adequate fire department apparatus access against the standard adopted in NFPA 1, *Uniform Fire Code*. The proposed regulation is not anticipated to have negative economic effect on the private sector in new development. The proposed regulation may have a positive economic effect through the allowance for performance-based design which may provide for narrower streets. The proposed regulation applies standards for fire department apparatus access to existing roadways at the time of redevelopment or reconstruction. Review in such cases already occurs and will not add to existing work-load.

If additional space is needed, please attach.

OMB REVIEW

Fiscal Impact Statement approved Beryl L. Feunberg for Joseph F. Beach
 OMB Director

Fiscal Impact Statement not approved, OMB will contact department to remedy.